

Housekeeping Items

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Wellesley Water and Wastewater Master Plan

Virtual Public Meeting
Public Consultation Center #1
April 19, 2023, 7:00 p.m.



Kaoru to open:

Thank you, Kylee. Welcome everyone to the first public meeting for the Region of Waterloo's **Wellesley Water and Wastewater Master Plan**

My name is Kaoru, and I am the Region's project manager for this plan, and I will also be the main speaker tonight. With me to help answer question is Tom Mahood from Jacobs Canada who is assisting the Region to undertake this master plan. Kylee will be in the background to assist with the webinar.

We'd like to start tonight with an Indigenous greeting

Today we gather on the traditional territory of the Haudenosaunee, Anishinaabe and neutral peoples. We recognize our responsibility to serve as stewards to the land and honour the original caretakers that came before us.

Welcome!

The Wellesley Water and Wastewater Master Plan

- Project
- Process
- Public participation
- Plan

The purpose of today's meeting is to introduce you to the Project, the Process it will take, the opportunities for Public participation, and what the end Plan could include.

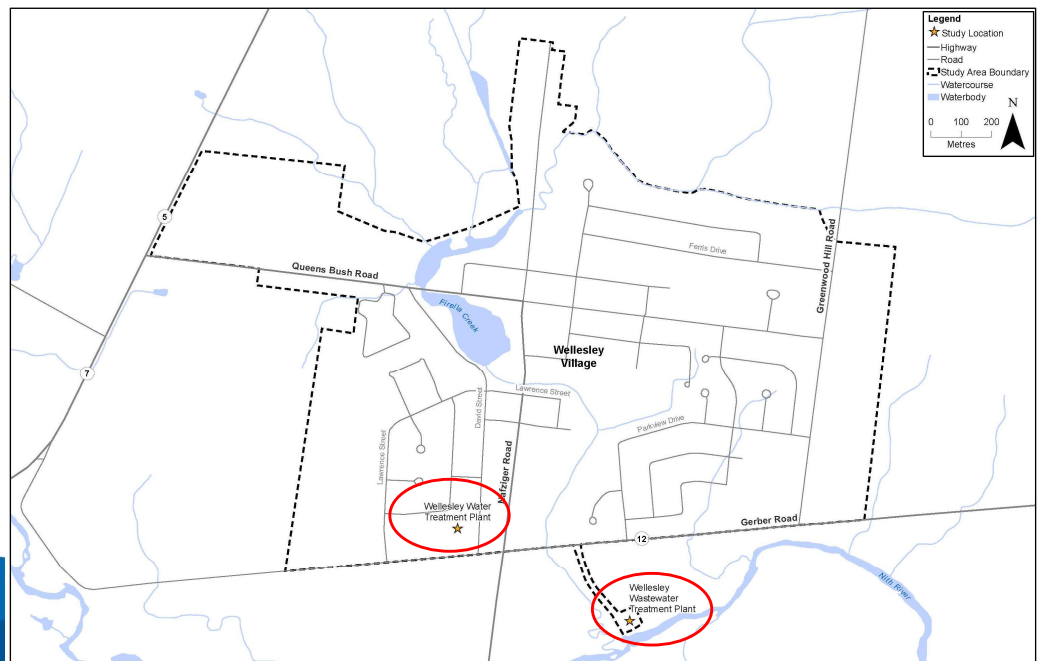
Project overview

1. Water treatment
2. Water distribution
3. Wastewater treatment
4. Wastewater collection

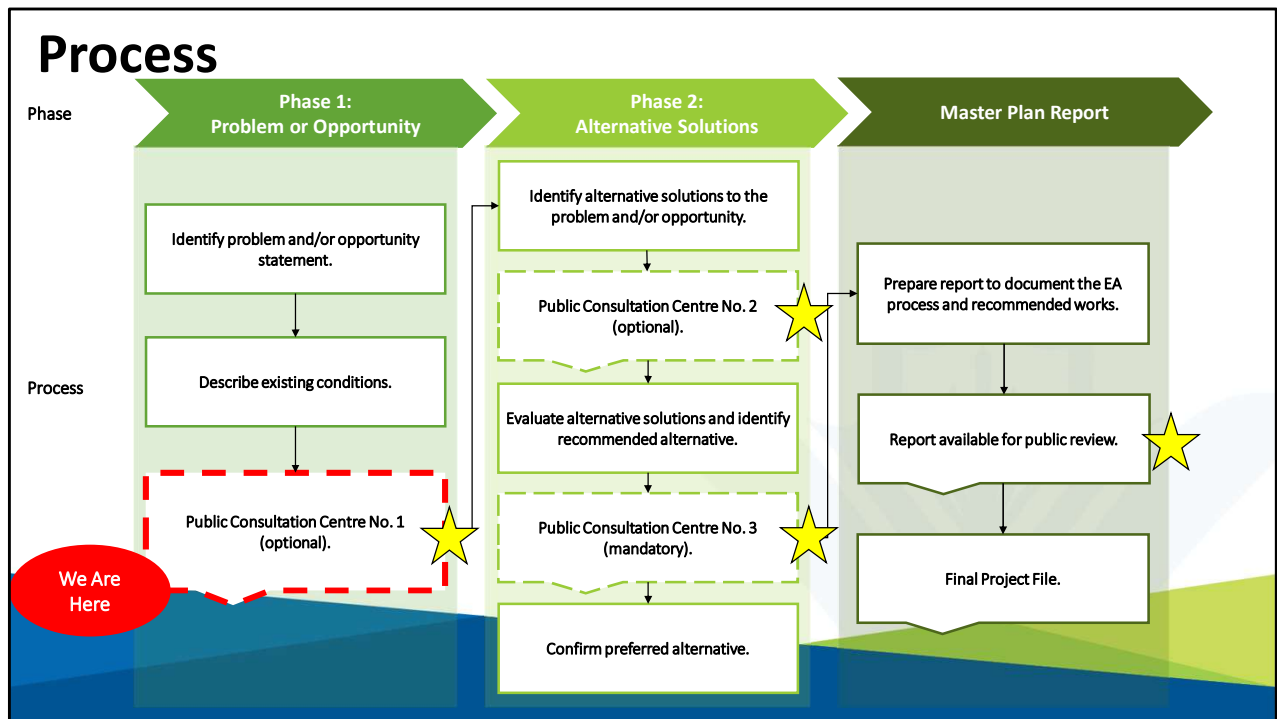
The objective of this project is to develop a long-term plan for the water and wastewater infrastructure in the Village of Wellesley.

To meet those objectives, we will review population forecasts, look at the condition of our existing assets, such as our treatment plants and pipe networks, and review new opportunities for water supply and wastewater services in the Village of Wellesley.

Study area



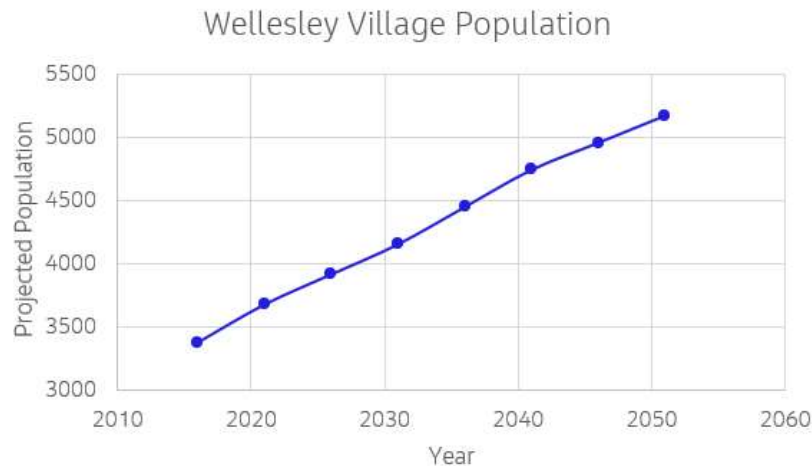
- The **preliminary** study area includes the Village of Wellesley and surrounding future growth areas indicated by the dotted line in this map. The **final study area may be modified based on the recent amendments to the Region's official plan and updates will be reflected in future master plan communications.**
- Land use within the study area is primarily classified as urban residential with scattered institutional and industrial land use.
- The location of our water and wastewater treatment facilities are shown by the two red circles.



- This study is being carried out as a Master Plan in accordance with the Municipal Engineers Association's Municipal Class Environmental Assessment process. Under this process, the study will follow an approach where we will define projects to a Schedule B Class EA level. What you see here is the flow of the process and the stars indicate points in the process where public feedback will be encouraged.
- In phase 1, the Region and Jacobs has already started to look at the existing conditions, the issues we are trying to solve, and what opportunities may be available.
- We're connecting with the public, like we are today, to be inclusive of all perspectives. We have technical experts on the project team with years of experience in developing these types of plans and understanding what works and what cannot, but we also want to hear from you and your lived-experiences.
- That's where we are today, as indicated by the first star.
- Moving forward into Phase 2, we start finding solutions to the problems and explore the opportunities. We will bring those back to you at a second public meeting, as indicated by the second star.

- We'll do a preliminary evaluation of those alternative solutions before making a recommendation. Once again, we come back to you with our preferred alternative, indicated by the third star – this check in will ensure we've captured what we've heard from you, and review **why** some other ideas and alternatives don't work.
- In the next phase, we'll prepare the Final Report of the Master Plan.
- The final report will be presented to Council after which will be available for public review, indicated by the fourth star.
- So that is the process we will follow Let me now let me take you through the existing conditions and some of the issues we will be examining.

Problem and Opportunity



➡ What are some of the key considerations we need to take into account?

Based on census data and help from the Region's Planning Division, the current population of the Village is approximately 3,400. Over the next 30 years, the population of the Village of Wellesley is expected to increase by roughly 40% as shown by this chart.

Similar to the study area, the Region and Township staff are reviewing the recent amendments to the Official Plan to identify if there will be any impacts to future community growth.

When it comes to water and wastewater, it is critical that the associated infrastructure meet both the existing and anticipated future needs.

What are some of the key considerations we need to take into account when looking at our water and wastewater infrastructure? This master plan is an opportunity to think about what we need to do to strengthen their reliability and resiliency.

Wellesley Water Treatment Plant

Considerations:

- Is there sufficient capacity at this facility for the identified growth?
- Will treatment requirements change?
- What is the impact of climate change?



Let's now look at some of the current assets in the Village:

The Wellesley water treatment plant is near the corner of Gerber Road and David street, tucked tightly behind the church as you can see in the picture. It was built in 1993.

- It is supplied by three nearby wells.
- Currently we are upgrading this facility by modernizing some equipment, replacing old parts, and creating efficiencies in the treatment process. **We are not currently expanding the capacity of the water supply system.**

Some of the considerations we are thinking about in this master plan include:

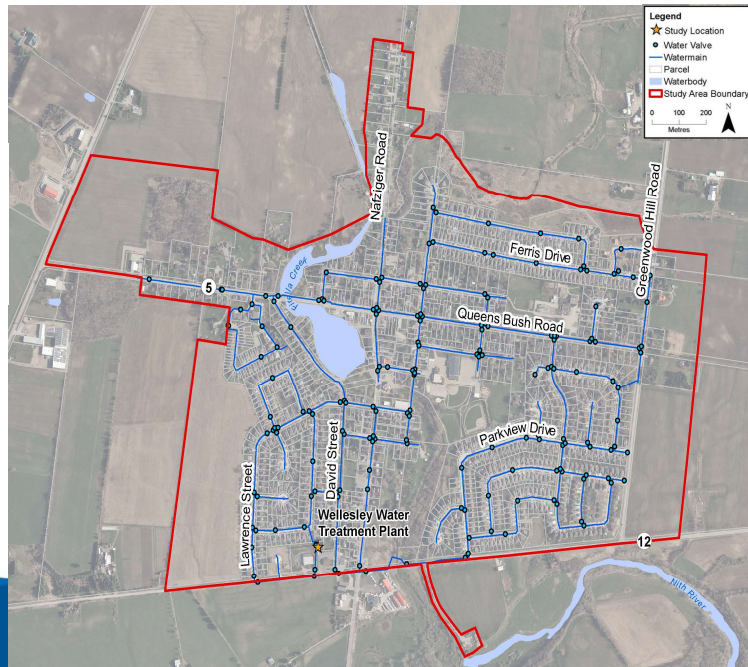
- Is there sufficient capacity at this facility for the identified growth?
- Will treatment requirements change that will require additional buildings?
- What is the impact of climate change?

One of the things we would like to hear from you is whether you have any other considerations, for example comments about the building itself? If you do, please use the feedback survey from on the project's Engage website – I'll provide details at the end of this webinar.

Water Distribution

Considerations:

- Is there sufficient capacity for identified growth?



Next let's talk about water distribution. When we talk about the water distribution in this area, we mean how water moves from our treatment plant, around the Village, to the property line. Note that from the property line to the tap, it is the responsibility of the property owner.

Once the water is treated, it is stored at the Wellesley WTP in three reservoirs which are next to the plant. Storage is an important part of the distribution system as it can help supply water during periods of high demand. One question to answer is if we have enough storage? Will we require additional water storage infrastructure such as a water tower?

Then there are five pumps that help to sustain adequate pressure in the distribution system. Are these sufficient to meet the village's demand?

We will examine if the storage and pipes have sufficient capacity for identified growth and if not, provide solutions.

If you have any other considerations, please let us know.

Wastewater Treatment

Considerations:

- Is there sufficient capacity for identified growth?
- Will treatment requirements change?
- What is the impact of climate change?



Next let's turn to wastewater. The original Wellesley WWTP, which lies off Gerber Road to the south, was constructed in 1973; it was expanded in 1993 to what is there today. The collected wastewater from the Village is treated here and then returned to the Nith River.

The picture you see is one of our package aeration systems.

The Wellesley WWTP has been fully compliant with the Ministry's regulations but has experienced operational challenges in the past like flow bottlenecks.

For the master plan, the considerations we anticipate include:

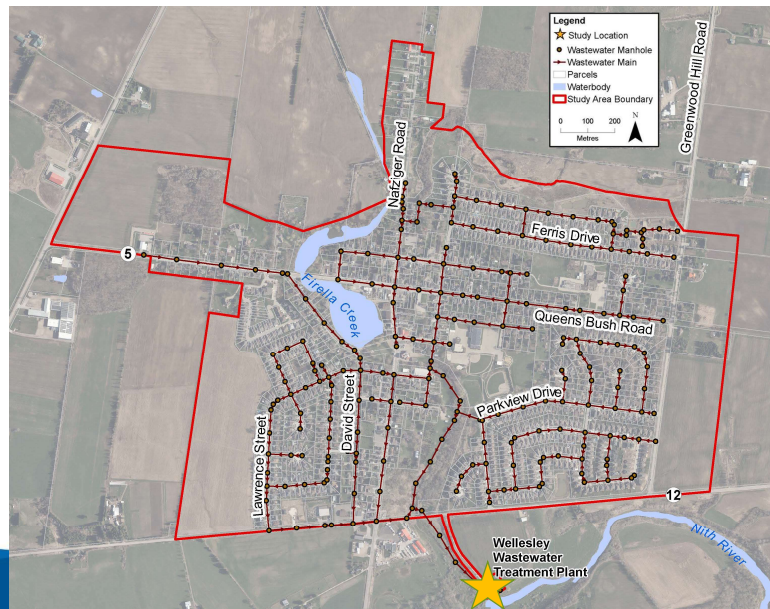
- Whether there is sufficient capacity for identified growth?
- Whether treatment requirements might change?
- What is the impact of climate change?

Let us know if you have other considerations.

Wastewater Collection

Considerations:

- Is there sufficient capacity for identified growth?
- What is the impact of climate change?



Finally, let's look at the wastewater collection system. This is the network of pipes that take the community's sewage to the wastewater treatment plant. What you see here is our network of wastewater pipes that run under the roads of the Village.

Relatively high inflow/infiltration (I/I) values within the Wellesley wastewater collection system are experienced. This create bottlenecks within the pipe, but also negatively affects the plant's ability to treat wastewater.

The consideration when we look at wastewater collection again include:
Whether there is sufficient capacity for identified growth? And What is the impact of climate change?

Next steps

- Share your thoughts on EngageWR: Wellesley Water by May 18, 2023
- Public meeting #2 — sharing what we know so far — Fall 2023
- Public meeting #3 — share preferred alternative — Spring 2024
- Council with preferred alternative — Spring 2024
- Report available for the public — Spring 2024

We would like to hear your preliminary thoughts. Please use the Engage WR website to submit your comments by May 18.

Looking to the future of this master plan, our second virtual public meeting to present the alternative solutions will be in Fall 2023.

The third virtual public meeting to present the preferred alternative will be in approximately Spring 2024.

We will then proceed to present the final report to Regional Council and also allow the public to review.

Thank you!

We want to hear from you. To access the survey and provide comments, go to this site by May 18, 2023: engageWR.ca/wellesleywater

For Project updates: regionofwaterloo.ca/wellesleywater

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As I mentioned, we have a survey to hear your input. You can access our survey and provide comments on this presentation at <https://www.engageWR/wellesleywater>

The survey will be open until May 18, 2023

We will take your feedback and have our team take them into consideration to create the master plan.

In addition, Project updates will be posted on:
<https://www.regionofwaterloo.ca/wellesleywater>

Tom and my contacts are shown here if you need to reach us directly.

This concludes the presentation portion of today's meeting. I will hand things back to Kylee.